

JJS/KHC



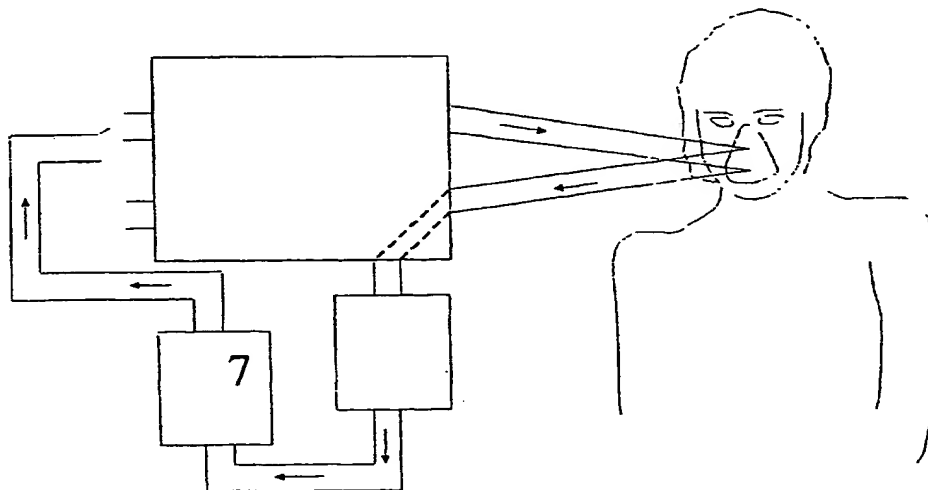
**(10) International Publication Number**  
**WO 00/45702 A1**

**PCT**

- (51) International Patent Classification<sup>7</sup>: A61B 5/08, A61M 16/00 [DK/DK]; Nordvestvej 11, DK-9000 Aalborg (DK). ANDREASSEN, Steen [DK/DK]; Kong Georgs Vej 7, DK-9000 Aalborg (DK).
- (21) International Application Number: PCT/DK00/00040
- (22) International Filing Date: 1 February 2000 (01.02.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
- |               |                              |    |
|---------------|------------------------------|----|
| PA 1999 00129 | 3 February 1999 (03.02.1999) | DK |
| PA 1999 00649 | 12 May 1999 (12.05.1999)     | DK |
| PA 1999 00859 | 17 June 1999 (17.06.1999)    | DK |
- (71) Applicants and
- (72) Inventors: REES, Stephen, Edward [GB/DK]; Vesterbro 60, 5.th., DK-9000 Aalborg (DK). TOFT, Egon, Steen [DK/DK]; Blegdalsparken 102, DK-9000 Aalborg (DK). THORGAARD, Pär [DK/DK]; Leonorevej 6, DK-9000 Aalborg (DK). KJÆRGAARD, Søren, Christensen [DK/DK]; Nordvestvej 11, DK-9000 Aalborg (DK). ANDREASSEN, Steen [DK/DK]; Kong Georgs Vej 7, DK-9000 Aalborg (DK).
- (74) Agent: PLOUGMANN, VINGTOFT & PARTNERS A/S; Sankt Annæ Plads 11, P.O. Box 3007, DK-1021 Copenhagen K. (DK).
- (81) Designated States (*national*): AE, AL, AM, AT, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR (utility model), KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW). Eurasian patent

*[Continued on next page]*

(54) Title: AUTOMATIC LUNG PARAMETER ESTIMATOR



**(57) Abstract:** A device for determining one or more respiratory parameters relating to an individual is disclosed, as well as a method for determining one or more respiratory parameters by means of the device, wherein the individual is suffering from hypoxemia or is at risk of hypoxemia. However, the method and the device may also be applied to healthy individual e.g. for testing of medicaments. The device is controlled by a computer equipped with suitable software and includes functionality for on-line continuous data collection, automatic assessment of the timing of measurements, automatic assessment of the next target (oxygen saturation of arterial blood (SpO<sub>2</sub>)), automatic assessment of the appropriate fraction of oxygen in inspired gas (FIO<sub>2</sub>) settings to achieve the target SpO<sub>2</sub>, automatic control of the FIO<sub>2</sub>, on-line parameter estimation, and automatic assessment of the number of measurements required.

[illegible]

**WO 00/45702 A1**



(AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent  
(AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,  
MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— *With international search report.*

**(15) Information about Correction:**

see PCT Gazette No. 19/2001 of 10 May 2001, Section II

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**(48) Date of publication of this corrected version:**

10 May 2001

09550000 1030004